# Staff Summary Sheet SAF/IEI 11305-01

| | To | Action | Signature (Surname), Grade, Date | | To | Action | Signature (Surname), Grade, Date |
|---|---|---|---|---|---|---|---|
| 1 | AF/ILEX | Coord | Tinsley, Col, 31 Oct 05 | 4 | SAF/IEI | Sig | Kuhn, SES, 7 Nov 05 |
| 2 | AF/ILE | Coord | KFerguson, 1 Nov 05 | | | | |
| 3 | AF/IL | App | Concur w/ Comment<br>Aimone, SES, 2 Nov | | | | |

| Grade and Surname of Action Officer | Symbol | Phone | Suspense Date |
|---|---|---|---|
| GS-14 Doddington | AFCESA/CESM | DSN 523-6222 | |

| Subject | SSS Date |
|---|---|
| FY05 Annual Energy Report to Congress (Part 1) | 25 Oct 05 |

**Summary**

**1. Purpose.** Obtain SAF/IEI signature on memo (Tab 1) forwarding the OMB Circular A-11, Exhibit 55, the FY05 DoD Energy Scorecard and the FY05 DoD data Management Report to OSD/ATL.

**2. Background.**

a. Executive Order 13123, 4 Jun 99, requires submittal of an annual energy report. OSD/ATL requires inputs (divided into two submissions) for the past fiscal year on each Service's energy program (Tab 2). OSD/ATL has asked for Service Reports by 28 Oct 05 (Part 1). The second submission is due to OSD/ATL by 10 Nov 05.

b. The SAF/IEI memo includes three attachments:

(1) The OMB Circular A-11, Exhibit 55 (Atch 1)

(2) The AF input to the FY05 DoD Energy Scorecard (AF not required to sign Scorecard) is at (Atch 2).

(3) The AF input to the FY05 DoD Energy Management Data Report is at (Atch 3).

Note: Non-Fleet Vehicles and Other Equipment numbers provided by HQ USAF/ILGM (Tab 3).

c. The standard facilities energy reduction was –26.1 percent. With the allowance for renewable energy credits, the energy reduction increases to –30.0 percent. This year's energy reduction goal was –30.0 percent. This represents a DUERS input completion rate of 90.2%. The second submission to OSD/ATL would provide the final percent reduction for the Air Force.

**3. Recommendation.** SAF/IEI sign memo at Tab 1 and forward package to OSD/ATL.

/////SIGNED///////

GUS G. ELLIOTT JR., Colonel, USAF
Commander
DSN 523-6101

3 Tabs
1. Proposed SAF/IEI Memo w/Atch
2. OSD/ATL Energy Mgt Call, 22 Aug 05
3. HQ USAF/ILGM coordination, 21 Oct 05



9/c/AWol

**DEPARTMENT OF THE AIR FORCE**
**WASHINGTON DC**

08 NOV 2005

**OFFICE OF THE ASSISTANT SECRETARY**

MEMORANDUM FOR DEPUTY UNDER SECRETARY OF DEFENSE
(INSTALLATIONS AND ENVIRONMENT)

FROM: SAF/IEI
1665 Air Force Pentagon
Washington, DC 20330-1665

SUBJECT: Submission of Annual Energy Report Requirements Part 1of 2

The attached OMB Circular A-11, Exhibit 55, FY04 Energy Scorecard and the FY05 Data Management Report is provided in accordance with your memorandum request of 22 Aug 05. If your staff has any questions concerning this matter, please contact Mr. Gerald Doddington, HQ AFCESA/CESM, Tyndall AFB FL, DSN 523-6222.

FRED W. KUHN
Deputy Assistant Secretary of the Air Force
(Installations)

Attachments:
1. OMB Circular A-11, Exhibit 55
2. FY05 DoD Energy Scorecard
3. FY05 DoD Energy Management Data Report

cc:
SAF/US
HQ USAF/IL

# FY 2007 FUNDING REQUEST FOR ENERGY AND TRANSPORTATION EFFICIENCY MANAGEMENT

Agency: USAF
Date: 21-Oct-05
Prepared by: Gerald Doddington
Phone: DSN: 523-6222

## 1.1 IDENTIFICATION OF FUNDS FOR ENERGY EFFICIENCY MANAGEMENT AS REQUIRED BY E.O. 13123

| | 2005 | | 2006 | | 2007 | | |
|---|---|---|---|---|---|---|---|
| | Amount (thou. $) | Account(s) | Amount (thou. $) | Account(s) | Amount (thou. $) | Account(s) | Page(s) in Budget Submission to OMB |
| ESPC and/or UESC negotiation/administration | $1,328 | O&M | $1,539 | O&M | $1,651 | O&M | |
| Direct spending on energy efficiency | $61,310<br>$11,099 | O&M<br>ECIP | $65,346<br>$17,422 | O&M<br>ECIP | $73,291<br>$16,728 | O&M ECIP | |
| Direct spending on training | $323 | O&M | $659 | O&M | $704 | O&M | |
| Energy Star ® building design/ construction incremental costs | $550 | O&M | $455 | O&M | $810 | O&M | |
| "Green Power" purchases | $12,657 | O&M | $19,377 | O&M | $24,253 | O&M | |
| On-site generation and renewable power generation | $2,771 | O&M | $4,721 | O&M | $7,148 | O&M | |
| Other (please specify) Dev Water Mgt plans | $2,692 | O&M | $1,912 | O&M | $2,272 | O&M | |
| Amount of FY 05 energy cost savings realized, including financial benefits resulting from shared energy savings contracts | $2,689 | | N/A | N/A | N/A | N/A | N/A |
| **Total** | **$81,631**<br>**$11,099** | O&M<br>ECIP | **$94,009**<br>**$17,422** | O&M<br>ECIP | **$110,129**<br>**$16,728** | O&M<br>ECIP | |

## 1.2 IDENTIFICATION OF FUNDS FOR TRANSPORTATION EFFICIENCY MANAGEMENT AS REQUIRED BY E.O. 13149

| | 2005 | | 2006 | | 2007 | | |
|---|---|---|---|---|---|---|---|
| | Amount (thou. $) | Account(s) | Amount (thou. $) | Account(s) | Amount (thou. $) | Account(s) | Page(s) in Budget Submission to OMB |
| Acquisition of alternative fuel vehicles | $7,170.2 | 3400/3080 | $9,729.7 | 3400/3080 | $10,702.6 | 3400/3080 | |
| Infrastructure development and use of alternative fuels | $6,005.0 | | $6,000.0 | | $6,000.0 | | |
| Implementation of compliance strategy, including any modifications | $309.2 | 3400 | $273.9 | 3400 | $301.2 | 3400 | |
| Direct spending on training | $288.9 | 3400/409 | $291.7 | 3400/409 | $320.9 | 3400/409 | |
| Procurement of environmentally preferable motor vehicle products | $1,499.3 | 3400/619 | $1,597.9 | 3400/619 | $1,757.6 | 3400/619 | |
| Other (please specify) _____ | | | | | | | |
| **Total** | **$15,272.6** | | **$17,893.2** | | **$19,082.3** | | |

# FY 2005 Federal Agency Energy Scorecard

| Department/Agency Name | Contact Name and Phone |
|---|---|
| USAF | Gerald Doddington |

| Did your agency . . . | Yes | No | Anticipated Submittal Date |
|---|---|---|---|
| 1. Submit its FY 2005 energy report to OMB and DOE by January 1, 2006 (Sec. 303)? | X | | |
| 2. Submit a FY 2006 Implementation Plan by January 1, 2006 (Sec. 302)? | X | | |
| **Did your agency . . .** | **Yes** | **No** | **Comments** |
| 3. Implement or continue to use renewable energy projects at Federal installations or facilitate the siting of renewable generation on Federal land in FY 2005 (Sec. 204)? (Report all self-generated renewable energy from projects installed after 1990; refer to Table 1-7 on the Energy Management Data Report) | X | | If yes, how many projects and how much energy generated? (Specify unit: MWH or MMBtu)<br># Projects / Energy / Unit<br>Solar 11 142.3 MWH<br>Wind 3 5,851.3 MWH<br>Thermal[1] 9 60,134.4 MMBtu<br>Biomass 2 22,501.6 MMBtu<br>Other RE[2] 4 1920.3 MMBtu |
| 4. Purchase energy generated from new renewable energy sources in FY 2005 (Sec. 204)?[3] (Refer to Table 1-6 on the Energy Management Data Report) | X | | If yes,<br>how much: 1,047,766 MWH<br>or _____ MMBtu |
| 5. Invest direct FY 2005 appropriations in projects contributing to the goals of the Order (Sec. 301)? | X | | If yes,<br>how much:[4] $81,631K |
| 6. Specifically request funding necessary to achieve the goals of the Order in its FY 2007 budget request to OMB (Sec. 301)? (Refer to OMB Circular A-11, Section 25.5, Table 2) | X | | If yes,<br>how much:[5] $110,129K |
| 7. Perform energy audits of 10% of its facility space during the fiscal year (Sec. 402)? | X | | Total square footage of facility space audited this FY? 63,734k(sf)<br>Total square footage of facility space? 626,453(sf)<br>What percentage of facility space was audited during the FY? 10.2 (%)<br>How much facility space has been audited since 1992?[6] 107 (%) |
| 8. Issue to private-sector energy service companies (ESCOs) any energy savings performance contract (ESPC) delivery orders (Sec. 403(a))? (Refer to Table 2-2 on the Energy Management Data Report) | X | | How many? 7<br>Annual savings (MMBtu): 388,310<br>Total investment value[7]: $46,239K<br>Cumulative guaranteed cost savings: $98,007K<br>Award value: $98,007K |

1 Examples are geothermal, solar thermal, and geothermal heat pumps. Thermal energy from geothermal heat pumps should be determined as follows: Thermal energy = Total geothermal heat transferred – electrical energy used.
2 Please specify "Other".
3 "New" renewable energy means sources developed after 1990.
4 Ensure consistency with A-11 and Data Report.
5 Ensure consistency with A-11 and Data Report.
6 Should be greater than 100% if all facility space has been audited at least once since 1992.
7 Investment value includes design, materials, labor, overhead, and profit but excludes contractor's financing costs and government's administration costs. Using investment value allows comparison with other traditional execution methods such as appropriated and working capital funded projects.

| Did your agency . . . | Yes | No | Comments |
|---|---|---|---|
| 9. Issue any utility energy services contract (UESC) delivery orders (Sec. 403(a))? (Refer to Table 2-3 on the Energy Management Data Report) | X | | How many? 3<br>Annual savings (MMBtu): 97,577<br>Total investment value[7]: $7,980K<br>Cumulative cost savings: $11,137K<br>Award value: $11,137K |
| 10. Incorporate energy efficiency requirements into relevant acquisitions (Sec. 403(b)(3))? | X | | |
| 11. Adopt and apply the sustainable design principles (e.g., Whole Building Design Guide, Leadership in Energy and Environmental Design (LEED)) to the siting, design, and construction of new facilities or major (budget line item) renovations begun in FY 2005 (Sec. 403(d))? | X | | Number of new building (or major renovation) design/construction projects in FY 2005[8]: 260<br>Number of these projects that can or will be certified under LEED[8]: 44 |
| 12. Provide training to appropriate personnel[9] on energy management (Sec. 406(d))? | X | | Number of appropriate personnel trained: 2177<br>Total number of appropriate personnel: 4279 |
| 13. Implement any additional management tools (Sec. 406)? | X | | Check all that apply:<br>Awards: X<br>Performance Evaluations: X<br>Total Showcase Facilities:[10] 2<br>Number of Showcase Facilities designated in fiscal year: 0 |
| 14. Establish Water Management Plans (WMPs) and implement at least 4 Best Management Practices (BMPs) in at least 20% of agency facilities (Sec. 207, 503(f))? | X | | Number of facilities with WMPs and 4 BMPs: 47<br>Number of facilities in agency inventory: 176 |

**NOTE: Provide additional information below if a "No" reply is used for any of the questions above.**

8 Count projects only once, regardless of phase. For example, if in FY 2005, your agency had 10 new building or major renovation projects, of which 2 can be LEED certified, then report 10 and 2, respectively, in the spaces provided. If the project was designed and reported on in response to this question in a previous year, do not report it as a new project in FY 2005, even if construction commenced or continued in FY 2005.

9 Appropriate personnel include the agency energy management team as well as Federal employees and on-site contractors who are energy or facility managers, operations and maintenance workers, design personnel, procurement and budget staff, and legal counsel.

10 This should be last year's reported total plus facilities designated as a "showcase facility" this year.

| | Base Year | Previous Year (2004) | Current Year (2005) | % Change (Current vs. Base) |
|---|---|---|---|---|
| 5. Site Energy Efficiency Improvement Goals (Sec. 202). 1985 Base Year | **156,823 Btu/Ft$^2$** | **116,470 Btu/Ft$^2$** | **109,731 Btu/Ft$^2$** | **-30.0 %** |
| 6. Industrial/Energy Intensive Facilities Goals (Sec. 203). 1990 Base Year | **209,550 Btu/unit** | **212,642 Btu/unit** | **197,998 Btu/unit** | **-5.5 %** |
| 7. Source Energy Use (Sec. 206). 1985 Base Year[13] | **197,337 BBtu** | **159,994.7 BBtu** | **153,352.0 BBtu** | **-22.3 %** |
| 8. Water Conservation Goal (Sec. 207). 2000 Base Year | **51,862.2 MGal** | **41,142.2 MGal** | **38,112.7 MGal** | **-26.5 %** |
| 9. Renewable Energy (Sec. 204) Energy used from self-generation and RE purchases | **N/A** | **1151.5 BBtu** | **3680.0 BBtu** | N/A |

breviation Key: Btu/Ft$^2$ = British thermal units per gross square foot
Btu/unit = British thermal units per unit of productivity (or gross square foot when such a unit is inappropriate or unavailable)
MGal = Million gallons
MMBtu = Million British Thermal Units
BBtu = Billion British Thermal Units
RE = Renewable energy
N/A = Not applicable

11 Please do not change your base year numbers.
12 Please do not change last year's reported numbers.
13 This should be the total source energy for both standard buildings and industrial facilities.

# FY 2005 DoD ENERGY MANAGEMENT DATA REPORT

Agency: USAF
Date: 21-Oct-05
Prepared by: Mr. Gerald Doddington
Phone: DSN 523-6222

**PART 1: ENERGY CONSUMPTION AND COST DATA**

**1-1. Standard Buildings/Facilities**
**FY 2005**

| Energy Type | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | Unit Cost ($) | Site-Delivered Btu (Billion) | Est. Source Btu (Billion) | Est. Carbon Emissions (Metric Tons) |
|---|---|---|---|---|---|---|---|
| Electricity | MWH | 7,702,785.8 | $504,127.2 | $0.07 /kWh | 26,281.9 | 91,278.0 | 1,315,147 |
| Fuel Oil | Thou. Gal. | 52,988.0 | $67,395.9 | $1.27 /gallon | 7,349.4 | 7,349.4 | 146,621 |
| Natural Gas | Thou. Cubic Ft. | 23,182,756.5 | $182,352.3 | $7.87 /Thou Cu Ft | 23,901.4 | 23,901.4 | 345,854 |
| LPG/Propane | Thou. Gal. | 2,929.2 | $3,717.6 | $1.27 /gallon | 279.7 | 279.7 | 4,753 |
| Coal | S. Ton | 200,587.8 | $15,639.8 | $77.97 /S. Ton | 4,930.4 | 4,930.4 | 126,910 |
| Purch. Steam | BBtu | 776.3 | $17,685.5 | $22.78 /MMBtu | 776.3 | 1,079.0 | 27,774 |
| Other | BBtu | 3,472.1 | $56,713.7 | $16.33 /MMBtu | 3,472.1 | 3,472.1 | |
| | | Total Costs: | $847,632.0 | Total: | 66,991.4 | 132,290.2 | 1,967,058 |
| Standard Buildings/Facilities (Thou. Gross Square Feet) | | **577,927.0** | | Btu/GSF: | 115916.64 | 228904.71 | |
| | | | | Btu/GSF w/ RE Purchase Credit: | 109730.77 | 222718.84 | |
| | | | | Btu/GSF w/ RE & Sec. 502(e) Credit: | 109730.77 | 222718.84 | |

**1-1a. Standard Buildings/Facilities Out Year Projection**

Note: industrial SF and costs added to FY06/07 projecttions to meet EPAct 2005 requirements

| | | FY 2006 | | FY 2007 | |
|---|---|---|---|---|---|
| Energy Type | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | Annual Consumption | Annual Cost (Thou. $) |
| Electricity | MWH | 8,857,018.3 | $579,668.7 | 8,679,877.9 | $568,075.4 |
| Fuel Oil | Thou. Gal. | 52,268.0 | $66,480.1 | 51,222.7 | $65,150.5 |
| Natural Gas | Thou. Cubic Ft. | 27,009,863.6 | $212,455.8 | 26,469,666.4 | $208,206.7 |
| LPG/Propane | Thou. Gal. | 2,932.8 | $3,722.1 | 2,874.2 | $3,647.7 |
| Coal | S. Ton | 196,576.0 | $15,327.0 | 192,644.5 | $15,020.4 |
| Purch. Steam | BBtu | 1,236.0 | $28,157.8 | 1,211.2 | $27,594.7 |
| Other | BBtu | 3,402.7 | $55,579.5 | 3,334.6 | $54,467.9 |
| | | Total Costs: | $961,391.0 | Total Costs: | $942,163.2 |
| Standard Buildings/Facilities (Thou. Gross Square Feet) | | 626,453.0 | | Standard Buildings/Facilities (Thou. Gross Square Feet) | 626,453.0 |

## 1-2. Industrial, Laboratory, Research, and Other Energy-Intensive Facilities

**FY 2005**

| Energy Type | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | Unit Cost ($) | Site-Delivered Btu (Billion) | Est. Source Btu (Billion) | Emissions (Metric Tons) |
|---|---|---|---|---|---|---|---|
| Electricity | MWH | 1,334,988.0 | $61,659.1 | $0.05 /kWh | 4,555.0 | 15,819.6 | 227,931 |
| Fuel Oil | Thou. Gal. | 346.7 | $357.1 | $1.03 /gallon | 48.1 | 48.1 | 959 |
| Natural Gas | Thou. Cubic Ft. | 4,378,328.8 | $31,468.1 | $7.19 /Thou Cu Ft | 4,514.1 | 4,514.1 | 65,318 |
| LPG/Propane | Thou. Gal. | 63.4 | $83.4 | $1.31 /gallon | 6.1 | 6.1 | 103 |
| Coal | S. Ton | 0.0 | $0.0 | #DIV/0! /S. Ton | 0.0 | 0.0 | 0 |
| Purch. Steam | BBtu | 484.9 | $3,618.1 | $7.46 /MMBtu | 484.9 | 674.0 | 17,349 |
| Other | BBtu | 0.0 | $215.6 | #DIV/0! /MMBtu | 0.0 | 0.0 | |
| | | Total Costs: | $97,401.3 | Total: | 9,608.1 | 21,061.8 | 311,661 |

| Energy-Intensive Facilities (Thou. Gross Square Feet) | **48,526.0** |
|---|---|

| | | |
|---|---|---|
| Btu/GSF: | 197,998 | 434,031 |
| Btu/GSF w/ RE Purchase Credit: | 197,998 | 434,031 |
| Btu/GSF w/ RE & Sec. 502(e) Credit: | 197,998 | 434,031 |

## 1-2a. Industrial, Laboratory, Research, and Other Energy-Intensive Facilities Out Year Projection

| | | FY 2006 | | | FY 2007 | |
|---|---|---|---|---|---|---|
| Energy Type | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | | Annual Consumption | Annual Cost (Thou. $) |
| Electricity | MWH | 0.0 | $0.0 | | 0.0 | $0.0 |
| Fuel Oil | Thou. Gal. | 0.0 | $0.0 | | 0.0 | $0.0 |
| Natural Gas | Thou. Cubic Ft. | 0.0 | $0.0 | | 0.0 | $0.0 |
| LPG/Propane | Thou. Gal. | 0.0 | $0.0 | | 0.0 | $0.0 |
| Coal | S. Ton | 0.0 | $0.0 | | 0.0 | $0.0 |
| Purch. Steam | BBtu | 0.0 | $0.0 | | 0.0 | $0.0 |
| Other | BBtu | 0.0 | $0.0 | | 0.0 | $0.0 |
| | | Total Costs: | $0.0 | | Total Costs: | $0.0 |

| Energy-Intensive Facilities (Thou. Gross Square Feet) | 0.0 | Energy-Intensive Facilities (Thou. Gross Square Feet) | 0.0 |
|---|---|---|---|

**1-3. Exempt Facilities** Note: this is for Street/airfield lighting contructed after 1985, no SF and approved by DOE

**FY 2005**

| Energy Type | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | Unit Cost ($) | Site-Delivered Btu (Billion) | Est. Source Btu (Billion) | Est. Carbon Emissions (Metric Tons) |
|---|---|---|---|---|---|---|---|
| Electricity | MWH | 5,747.0 | $376.1 | $0.07 /kWh | 19.6 | 68.1 | 981 |
| Fuel Oil | Thou. Gal. | 0.0 | $0.0 | #DIV/0! /gallon | 0.0 | 0.0 | 0 |
| Natural Gas | Thou. Cubic Ft. | 0.0 | $0.0 | #DIV/0! /Thou Cu Ft | 0.0 | 0.0 | 0 |
| LPG/Propane | Thou. Gal. | 0.0 | $0.0 | #DIV/0! /gallon | 0.0 | 0.0 | 0 |
| Coal | S. Ton | 0.0 | $0.0 | #DIV/0! /S. Ton | 0.0 | 0.0 | 0 |
| Purch. Steam | BBtu | 0.0 | $0.0 | #DIV/0! /MMBtu | 0.0 | 0.0 | 0 |
| Other | BBtu | 0.0 | $0.0 | #DIV/0! /MMBtu | 0.0 | 0.0 | |
| | | Total Costs: | $376.1 | Total: | 19.6 | 68.1 | 981 |
| Exempt Facilities (Thou. Gross Square Feet) | | 0.0 | | Btu/GSF: | #DIV/0! | #DIV/0! | |
| | | | | Btu/GSF w/ RE Purchase Credit: | #DIV/0! | #DIV/0! | |
| | | | | Btu/GSF w/ RE & Sec. 502(e) Credit: | #DIV/0! | #DIV/0! | |

**1-3a. Exempt Facilities Out Year Projection**

| | | FY 2006 | | | FY 2007 | |
|---|---|---|---|---|---|---|
| Energy Type | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | | Annual Consumption | Annual Cost (Thou. $) |
| Electricity | MWH | 0.0 | $0.0 | | 0.0 | $0.0 |
| Fuel Oil | Thou. Gal. | 0.0 | $0.0 | | 0.0 | $0.0 |
| Natural Gas | Thou. Cubic Ft. | 0.0 | $0.0 | | 0.0 | $0.0 |
| LPG/Propane | Thou. Gal. | 0.0 | $0.0 | | 0.0 | $0.0 |
| Coal | S. Ton | 0.0 | $0.0 | | 0.0 | $0.0 |
| Purch. Steam | BBtu | 0.0 | $0.0 | | 0.0 | $0.0 |
| Other | BBtu | 0.0 | $0.0 | | 0.0 | $0.0 |
| | | Total Costs: | $0.0 | | Total Costs: | $0.0 |
| Exempt Facilities (Thou. Gross Square Feet) | | 0.0 | | Standard Buildings/Facilities (Thou. Gross Square Feet) | 0.0 | |

**1-4. Non-Fleet Vehicles and Other Equipment** **Note: Data for this table will be provided by DESC)**

| | Consumption Units | Annual Consumption | Annual Cost (Thou. $) | Unit Cost ($) | Btu (Billion) | Est. Carbon Emissions (Metric Tons) |
|---|---|---|---|---|---|---|
| Auto Gasoline | Thou. Gal. | | | #DIV/0! /gallon | 0.0 | 0 |
| Diesel-Distillate | Thou. Gal. | | | #DIV/0! /gallon | 0.0 | 0 |
| LPG/Propane | Thou. Gal. | | | #DIV/0! /gallon | 0.0 | 0 |
| Aviation Gasoline | Thou. Gal. | | | #DIV/0! /gallon | 0.0 | 0 |
| Jet Fuel | Thou. Gal. | | | #DIV/0! /gallon | 0.0 | 0 |
| Navy Special | Thou. Gal. | | | #DIV/0! /gallon | 0.0 | 0 |
| Other | BBtu | | | #DIV/0! /MMBtu | 0.0 | |
| | | Total Costs | $0.0 | | 0.0 | 0 |

**1-5. WATER CONSUMPTION, COST AND EFFICIENCY MEASURES**

| | Consumption Units | Annual Consumption | Annual Cost (Thou. $) |
|---|---|---|---|
| Water | Million Gal. | 38,112.7 | $74,854.9 |
| Best Management Practice Implementation Tracking Data | | | |
| Number of facilities* in agency inventory | | | 176 |
| Number of facilities with completed water management plans | | | 104 |
| Number of facilities with at least four (4) BMPs fully implemented | | | 47 |
| *number in the agency inventory, can be buildings, bases, or campuses | | | |

## 1-6. RENEWABLE ENERGY/RENEWABLE ENERGY CERTIFICATE PURCHASES IN FY 2005

(Only include renewable energy purchases from resources developed after 1990)

| Description of *Each* Renewable Energy Purchase (examples below, insert additional rows as necessary for each separate purchase) | Amount Purchased (MWH) | or | Amount Purchased (Million Btu) | State or Region of Generation or Source | End Use Category (Standard, EI, or Exempt) |
|---|---|---|---|---|---|
| Electricity from Renewable Source | | | | | |
| USAFA | 60.0 | | | CO | Standard |
| RAF Lakenheath | 11,178.0 | | | England | Standard |
| Edwards AFB | 132,780 | | | CA | Standard |
| Grand Forks AFB | 2,520 | | | ND | Standard |
| Fairchild AFB | 67,278 | | | WA | Standard |
| Altus AFB | 3,000 | | | OK | Standard |
| Columbus AFB | 42,610 | | | AR | Standard |
| Goodfellow, TX | 17,884 | | | TX | Standard |
| Gunter | 45,906 | | | AL | Standard |
| Keesler, MS | 42,000 | | | MS | Standard |
| Lackland, TX | 70,800 | | | TX | Standard |
| Laughlin, TX | 16,842 | | | TX | Standard |
| Little Rock, AR | 39,000 | | | AR | Standard |
| Luke, AZ | 3,000 | | | AZ | Standard |
| Maxwell, AL | 3,000 | | | AL | Standard |
| Randolph,TX | 36,000 | | | TX | Standard |
| Sheppard, TX | 48,586 | | | TX | Standard |
| Tyndall, FL | 50,400 | | | FL | Standard |
| Vance, OK | 12,000 | | | OK | Standard |
| WHMC | 5,084 | | | TX | Standard |
| F.E.Warren,WY | 4,547 | | | WY | Standard |
| Barksdale | 15,817 | | | LO | Standard |
| Beale | 14,579 | | | CA | Standard |
| Cannon | 9,357 | | | NM | Standard |
| Davis-Monthan | 13,146 | | | AZ | Standard |
| Dyess | 72,885 | | | TX | Standard |
| Dyess Commissary | 1,788 | | | TX | Standard |
| Dyess - Off base sites | 602 | | | TX | Standard |
| Ellsworth | 23,866 | | | SD | Standard |
| Holloman | 13,150 | | | NM | Standard |
| Langley | 21,891 | | | VA | Standard |
| Minot AFB | 103,202 | | | ND | Standard |
| Mountain Home | 9,282 | | | ID | Standard |
| Nellis | 23,749 | | | NV | Standard |
| Offutt | 23,587 | | | NE | Standard |
| Seymour Johnson | 12,520 | | | NC | Standard |
| Shaw | 15,869 | | | SC | Standard |
| Whiteman | 18,000 | | | MI | Standard |
| Natural Gas from Landfill/Biomass | 0.0 | | 0.0 | | |
| Renewable Thermal Energy | 0.0 | | 0.0 | | |
| Other Renewable Energy (describe) | 0.0 | | 0.0 | | |

| | | | | |
|---|---|---|---|---|
| Total All Purchases | 1,047,766.3 | 0.0 | | |
| Total Purchases for Standard Buildings | 1,047,766.3 | 0.0 | | |
| Total Purchases for Energy Intensive Facilities | 0.0 | 0.0 | | |
| Total Purchases for Exempt Facilities | 0.0 | 0.0 | | |

**1-7. SELF-GENERATED RENEWABLE ENERGY INSTALLED AFTER 1990**

| | Consumption Units | Total Annual Energy | Energy Used by Agency* |
|---|---|---|---|
| Electricity from Renewables | MWH | 12,382.6 | 12,382.6 |
| Natural Gas from Landfill/Biomass | MMBtu | 695.8 | 695.8 |
| Renewable Thermal Energy** | MMBtu | 60,134.4 | 60,134.4 |
| Other Renewable Energy_RDF & daylighting | MMBtu | 1,920.5 | 1,920.5 |

*Energy used by agency equals total annual generation unless a project sells a portion of the energy it produces to another agency or the private sector. It can equal zero in the case of non-Federal energy projects developed on Federal land.

**Examples are geothermal, solar thermal, and geothermal heat pumps, and the thermal portion of combined heat and power projects. Energy savings from geothermal heat pumps should be based on energy savings compared to conventional alternatives like air-to-air heat pumps. If only electricity savings are known, multiply kWh savings by 3,412 to estimate renewable energy BTUs.

***For other renewable energy that does not fit any category, fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example energy displaced by daylighting technology or passive solar design.

**1-8. TOTAL RENEWABLE ENERGY USE AS A PERCENTAGE OF FACILITY ELECTRICITY USE**

| Energy Use (BBtu) | Facility Electricity Use (BBtu) | Percentage of Electricity Use |
|---|---|---|
| 3680.0 | 30,856.5 | 11.9% |

## PART 2: ENERGY EFFICIENCY IMPROVEMENTS

### 2-1. DIRECT AGENCY OBLIGATIONS

(Agencies may attach their final OMB Circular A-11 Energy and Transportation Efficiency Management Exhibit

| | FY 2005 | | Projected FY 2006 | |
|---|---|---|---|---|
| | (MMBTU) | (Thou. $) | (MMBTU) | (Thou. $) |
| Direct obligations for facility energy | [redacted] | $61,310.0 | [redacted] | $65,346.2 |
| Estimated annual savings | 494,940.5 | $6,529.4 | 548,949.6 | $8,475.9 |

### 2-2. ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC)

| | Annual savings (MMBTU) | (number/Thou. $) |
|---|---|---|
| Number of ESPC Task/Delivery | 422,212.0 | 8 |
| Investment value of ESPC Task/Delivery Orders | | $49,909.5 |
| Amount privately financed under ESPC Task/Delivery | | $49,909.5 |
| Cumulative guaranteed cost savings of ESPCs | | $5,038.7 |
| Total contract award value of ESPCs awarded in fiscal | | $105,714.3 |
| Total payments made to all ESP contractors in fiscal | | $50,044.1 |

### 2-3. UTILITY ENERGY SERVICES CONTRACTS (UESC)

| | Annual savings (MMBTU) | (number/Thou. $) |
|---|---|---|
| Number of UESC Task/Delivery | 82,610.8 | 3 |
| Investment value of UESC Task/Delivery Orders | | $6,105.1 |
| Amount privately financed under UESC Task/Delivery | | $6,105.1 |
| Cumulative cost savings of UESCs awarded in fiscal | | $895.5 |
| Total contract award value of UESCs awarded in fiscal | | $8,862.2 |
| Total payments made to all UESC contractors in fiscal | | $23,909.2 |

### 2-4. UTILITY INCENTIVES (REBATES)

| | Annual savings (MMBTU) | (Thou. $) |
|---|---|---|
| Incentives received and estimated | 813.0 | $1,551.0 |
| Funds spent in order to receive | [redacted] | $0.0 |

### 2-5. TRAINING

| | (number) | (Thou. $) |
|---|---|---|
| Number of personnel | 2,177 | $327.0 |

**AGENCY COMPILATION WORKSHEET FOR SECTION 502(e) CREDIT FOR PROJECTS THAT INCREASE SITE ENERGY USE BUT SAVE SOURCE ENERGY**
(See http://www.eere.energy.gov/femp/pdfs/sec502e_%20guidance.pdf)

**Standard Buildings/Facilities**

| Name of Project Saving Source Energy in Current Fiscal Year (insert additional rows as necessary) | Annual Site Energy Increase with the Project (Million Btu) | Annual Source Energy Saved with the Project (Million Btu) | 502(e) Adjustment to Annual Site Energy (Million Btu) |
|---|---|---|---|
| Project No. 1 | 0.0 | 0.0 | 0.0 |
| Project No. 2 | 0.0 | 0.0 | 0.0 |
| Project No. 3 | 0.0 | 0.0 | 0.0 |
| Totals | 0.0 | 0.0 | 0.0 |

**Industrial, Laboratory, Research, and Other Energy-Intensive Facilities**

| Name of Project Saving Source Energy in Current Fiscal Year (insert additional rows as necessary) | Annual Site Energy Increase with the Project (Million Btu) | Annual Source Energy Saved with the Project (Million Btu) | 502(e) Adjustment to Annual Site Energy (Million Btu) |
|---|---|---|---|
| Project No. 1 | 0.0 | 0.0 | 0.0 |
| Project No. 2 | 0.0 | 0.0 | 0.0 |
| Project No. 3 | 0.0 | 0.0 | 0.0 |
| Totals | 0.0 | 0.0 | 0.0 |

**Exempt Facilities**

| Name of Project Saving Source Energy in Current Fiscal Year (insert additional rows as necessary) | Annual Site Energy Increase with the Project (Million Btu) | Annual Source Energy Saved with the Project (Million Btu) | 502(e) Adjustment to Annual Site Energy (Million Btu) |
|---|---|---|---|
| Project No. 1 | 0.0 | 0.0 | 0.0 |
| Project No. 2 | 0.0 | 0.0 | 0.0 |
| Project No. 3 | 0.0 | 0.0 | 0.0 |
| Totals | 0.0 | 0.0 | 0.0 |

OFFICE OF THE UNDER SECRETARY OF DEFENSE
3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

ACQUISITION
TECHNOLOGY
AND LOGISTICS

AUG 2 2 2005

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY
(INSTALLATIONS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY
(INSTALLATIONS AND ENVIRONMENT)
ACTING ASSISTANT SECRETARY OF THE AIR FORCE
(INSTALLATIONS, ENVIRONMENT AND LOGISTICS)
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF DEFENSE AGENCIES

SUBJECT: FY 2005 Annual Energy Management Report

Executive Order (EO) 13123 requires that Federal Agencies measure and report annually to the President their progress in meeting the goals and requirements of the EO. This report is to be submitted to the Department of Energy (DoE) and the Office of Management and Budget (OMB). Defense Agencies who control Federally–owned building space or directly pay the utilities in leased space are required to submit an energy management report to the Office of the Deputy Secretary of Defense (Installations and Environment).

The report continues to cover energy consumption for tactical vehicles and different categories of buildings, water consumption, strategies used to reduce energy consumption and improve efficiency, and renewable energy utilization.

The DoE annual report guidance and OMB Circular A-11 guidance, along with DoD specific guidance and all the relevant downloadable forms, are available at the following website:
http://www.acq.osd.mil/ie/irm/Energy/energymgmt_report/fy05/energymgmt05.htm.

The OMB Circular A-11 is required to be incorporated with the budget submission. In order to meet deadlines set by DoE and OMB, we need your input in accordance with the following schedule:

| Report | Due Date |
|---|---|
| OMB Circular A-11, Exhibit 55 | October 28, 2005 |
| FY 2005 DoD Energy Scorecard and Data Report | October 28, 2005 |
| FY 2005 Annual Energy Management Report | November 10, 2005 |
| FY 2006 Energy Management Implementation Plan | November 10, 2005 |

Please ensure that the information provided in the A-11 matches that in the scorecard, data report, and narrative. Additionally, please provide a detailed explanation for any goal that is not met. Defense Components will only need to provide LPG/Propane data used for mobile equipment for table 1-4 of the "DoD Energy Management Data Report." Fuel consumption data will be provided by the Defense Energy Support Center issues of fuel to consuming platforms.

DLA/DESC is tasked with consolidating all Defense Component information and preparing this report for the Department. Data submissions should be submitted to: desc.aiteam@dla.mil, with a copy to robert.tomiak@osd.mil. My point of contact for this task is CDR Rob Tomiak. He can be reached at (703) 571-9074, FAX (703) 693-2659. DoD agencies should provide a POC and contact information no later than September 30, 2005.

Philip W. Grone
Deputy Under Secretary of Defense
(Installations and Environment)

-----Original Message-----
**From:** Grages Jeff K Civ AFELM/VEMSO [mailto:Jeff.Grages@langley.af.mil]
**Sent:** Friday, October 21, 2005 8:26 AM
**To:** Adams Timothy K Contr AFCESA/CESM
**Cc:** Milligan Ricky LtCol AF/ILGM; Cernac Tom CMSgt AF/ILGM; Batchelor Charles F Civ AFELM/VEMSO; Mays Craig E Maj AFELM VEMSO/; Pirson Michael A SMSgt AF/ILGM; Salgado Abel SMSgt AF/ILGM
**Subject:** RE: Annual A11-55 Exhibit Annual Energy Report
**Importance:** High

Tim,
This year's suspense was quite a bit different than last year's and thus required us to formulate projections without our EOY data which is normally used as a baseline. Our present asset management system will not have EOY cost data available until mid-November. Please keep in mind that the cost data (atch: USAF DoD revised OMB A-11 report 21 Oct 05 Costs.xls) is the result of educated estimations/calculations based on the last three years expenditures and projections. Note: We are presently testing a new asset management system (LIAMS, Logistics Integrated Asset Management System) that will eventually enable us to gather real time data.

The fuel consumption data (atch: USAF DoD DataReport FY05 17 Oct 05 Table 1_4 Fuel.xls) is a consolidation of all ground fuels that require a VIL key for access to our military fuel stations and came directly from DESC. At this time we are working with AFPET & DESC to improve the VIL key coding guidance to the field.

In any case, here are the spreadsheets for subject matter and per our telecon, we should be able to have an ILGM coordinated narrative and more concise data by 10 Nov 05. *Note: ILGM has not coordinated on the attached spreadsheest because they are all at a conference this entire week.*

Have a good one and give me a call if you have any questions.
Jeff

Jeff Grages
HAF AFELM VEMSO
Langley AFB, VA
DSN: 574-4410
Comm: 757-764-4410
Fax: 757-764-4415
Website: https://www.vemso.hq.af.mil